APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,693	03/08/2006	Bernard Le Bars	274883US2PCT	3914

22859   7590   10/17/2008
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EXAMINER
ARCHER, CHRISTOPHER B

ART UNIT	PAPER NUMBER
4148	

NOTIFICATION DATE	DELIVERY MODE
10/17/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)
Office Action Summary	10/541,693	LE BARS ET AL.
	Examiner	Art Unit	
	CHRISTOPHER B. ARCHER	4148	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 March 2006</u>.
2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>11-20</u> is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>11-20</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on <u>08 March 2006</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.
   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a)☒ All b)☐ Some * c)☐ None of:
      1.☒ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>15 September 2005</u>.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1.   The instant application having Application No. 10/541,693 filed on 03/08/2006 is

presented for examination by the examiner.

Examiner Notes

2.   Examiner cites particular columns and line numbers in the references as applied

to the claims below for the convenience of the applicant.   Although the specified

citations are representative of the teachings in the art and are applied to the specific

limitations within the individual claim, other passages and figures may apply as well. It

is respectfully requested that, in preparing responses, the applicant fully consider the

references in entirety as potentially teaching all or part of the claimed invention, as well

as the context of the passage as taught by the prior art or disclosed by the examiner.

Oath/Declaration

3.   The applicant's oath/declaration has been reviewed by the examiner and is found

to conform to the requirements prescribed in **37 C.F.R. 1.63.**

Specification

4.   The disclosure is objected to because of the following informalities:

             - Fig. 2a has a reference numeral @22 that is not found in the

specification relating to Fig. 2a.   This numeral is found in Fig. 1 and the

specifications for Fig. 1.

- Page 7, lines 6-9 recites "the secret codes Sm1, Sm2, Ss1, and Ss2 and the reception criteria defined by the module 14 are entered into the smart cards 22, 24, 26, and 28, respectively." The respective numbers are not in the correct order.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6.   Claim **11** is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted elements are:

- The distributor of the scrambled data and/or services and secret codes.

For examination purposes, the examiner assumes that a "central subscriber management module" transmits the codes to both the master and slave terminals.

7.   Claim **12** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

In regards to the line: "requesting that the first secret code be entered up in the slave terminal."

- The object and the subject of the "**requesting**" are unclear.

- The intended meaning of the term "**entered up in**" is unclear.

The examiner interpreted the above line to read "the slave terminal requests the first secret code from the central subscriber management module."

8.   Claim **12** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to the line: "requesting that the first secret code be entered up in the slave terminal, if the first secret code is not already stored in the slave terminal or if the second secret code is not in a biunique relationship with the first secret code saved in the slave terminal."

- The underlined portion above is unclear.

The examiner interpreted the line to read: "Or if the second secret code is not in a biunique relationship with the secret code previously saved in the slave terminal."

9.   Claim **14** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current

U.S. practice.   They appear to be a literal translation into English from a foreign

document and are replete with grammatical and idiomatic errors.

In regards to the line: "requesting that the new first secret code be

entered up in the slave terminal."

- The object and the subject of the "**requesting**" are unclear.

- The intended meaning of the term "**entered up in**" is unclear.

The examiner interpreted the above line to read "the slave terminal

requests the new first secret code from the user."

10.   Claim **14** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

In regards to the line: "if the new second secret code is not in a biunique

relationship with the new first secret code previously stored in the slave terminal,

requesting that the new first secret code be entered up in the slave terminal."

- The underlined portion above is unclear.

The examiner interpreted the line to read: "if the new second secret code is not in a biunique relationship with the secret code previously stored in the slave terminal."

Claim Rejections - 35 USC § 102

11.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12.   Claim **11** is rejected under 35 U.S.C. 102(e) as being anticipated by Moroney et al. (US 2003/0097563), hereafter referred to as Moroney.

Regarding claim 11:

Moroney teaches "A method for distribution of scrambled data and/or services to at least one master terminal and to at least one slave terminal linked with the master terminal, the method comprising: transmitting to the master terminal a first secret code and transmitting to each slave terminal a second secret code in a biunique relationship with the first secret code; and authorizing reception of the data and/or services by a slave terminal only if the first secret code is previously stored in the slave terminal" as **[(Moroney, [0031] and [0036]) shows that both the slave and master boxes must be delivered identical**

authentication keys in order to work correctly. (Moroney, [0037]) shows the

master encoding and delivering a message with the shared authentication

key. The slave will only continue operation if the slave has the same

authentication key as the master].

Claim Rejections - 35 USC § 103

13.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

14.   Claims **12, 13**, and **14** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Moroney in view of Okimoto et al. (US 2002/0051539), hereafter

referred to as Okimoto.

Regarding claim 12:

Moroney teaches "A method according to claim 11" and "storing the first

secret code in the master terminal and storing the second secret code in each

slave terminal;" as **[(Moroney [0031]) shows master and slave boxes that

each store their own unit and authentication keys]**, and "and for each use of

a slave terminal, requesting that the first secret code be entered up in the slave

terminal if the first secret code is not already stored in the slave terminal or if the

second secret code is not in a biunique relationship with the first secret code

saved in the slave terminal" as **[(Moroney [0068]) shows that when a communication failure has occurred, the set-top boxes must be reconfigured. (Moroney [0036]) shows that in any reconfiguration, identical authentication keys must be delivered to both the slave and master boxes]**, but fails to explicitly disclose "defining a first type of entitlement management messages to transmit the first secret code to the master terminal, and defining a second type of entitlement management messages to transmit the second secret code to each slave terminal."

However, Okimoto teaches "defining a first type of entitlement management messages to transmit the first secret code to the master terminal, and defining a second type of entitlement management messages to transmit the second secret code to each slave terminal" as **[(Okimoto, [0010]-[0013]) defines entitlement management messages that contain cryptographic keys for use by subscriber terminals]**.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have applied the teaching of Okimoto into Moroney as both deal with the common field of conditional access systems.

The ordinary skilled person would have been motivated to have applied the teaching of Okimoto into Moroney, since Okimoto provides a method of periodic key renewal for increased security among the set-top boxes (Okimoto [0010]-[0014]).

Regarding claim 13:

Moroney teaches "A method according to claim 11," but fails to explicitly disclose "further comprising generating at a variable frequency a new first secret code and a new second secret code in a biunique relationship with the new first secret code."

However, Okimoto teaches "generating at a variable frequency a new first secret code and a new second secret code in a biunique relationship with the new first secret code" as **[(Okimoto, [0013]) shows that the terminals will receive periodically renewed keys necessary for decryption of broadcast data]**.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have applied the teaching of Okimoto into Moroney as both deal with the common field of conditional access systems.

The ordinary skilled person would have been motivated to have applied the teaching of Okimoto into Moroney, since Okimoto provides a method of periodic key renewal for increased security among the set-top boxes (Okimoto [0010]-[0014]). Since Moroney (Moroney, [0036]) shows that these keys must be shared by both the master and slave for the set-top boxes to work correctly, it would have been obvious to renew both keys at the same time.

Regarding claim 14:

Moroney further teaches "storing the new first secret code in the master terminal and storing the new second secret code in each slave terminal;" as **[(Moroney [0031]) shows master and slave boxes that each store their own unit and authentication keys]**, and "and for each use of a slave terminal, if the new second secret code is not in a biunique relationship with the new first secret code previously stored in the slave terminal, requesting that the new first secret code be entered up in the slave terminal" as **[(Moroney [0068]) shows that when a communication failure has occurred, the set-top boxes must be reconfigured. (Moroney [0036]) shows that in any reconfiguration, identical authentication keys must be delivered to both the slave and master boxes]**, but fails to explicitly disclose "defining a first type of entitlement management messages to transmit the new first secret code to the master terminal, and defining a second type of entitlement management messages to transmit the new second secret code to each slave terminal."

However, Okimoto further teaches "defining a first type of entitlement management messages to transmit the new first secret code to the master terminal, and defining a second type of entitlement management messages to transmit the new second secret code to each slave terminal" as **[(Okimoto, [0010]-[0013]) defines entitlement management messages that contain cryptographic keys for use by subscriber terminals]**.

15.   Claims **15**, **16**, and **17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Moroney in view of Le Berre et al. (US 5,748,732), hereafter referred to as Le Berre.

Regarding claim 15:

Moroney teaches "A method according to claim 11", but fails to explicitly disclose "wherein each terminal comprises a security processor."

However, Le Berre teaches "wherein each terminal comprises a security processor" as **[(Le Berre, column 1, line 62 to column 2, line 22) show that the master and slave terminals both contain security processors]**.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have applied the teaching of Le Berre into Moroney as both deal with the common field of multiple set-top box security utilizing both master and slave terminals.

The ordinary skilled person would have been motivated to have applied the teaching of Le Berre into Moroney, since Le Berre conveys a method of using smart cards for additional set-top box security between master and slave terminals (Le Berre column 1, line 58 to column 2, line 12).

Regarding claim 16:

Le Berre further teaches "A method according to claim 15 wherein the security processor comprises a smart card linked with the terminal" as **[(Le**

Berre, column 2, lines 5-22) shows that the security processors of both the
master and slave card use smart cards]**.

Regarding claim 17:

Le Berre further teaches "A method according to claim 16 wherein the
smart card is paired with the terminal" as **[(Le Berre, column 4, lines 24-31)
shows that each smart card is uniquely paired with its respective terminal]**.

16.   Claim **18**, **19**, and **20** are rejected under 35 U.S.C. 103(a) as being unpatentable
over Le Berre et al. (US 5,748,732), hereafter referred to as Le Berre, in view of
Moroney et al. (US 2003/0097563), hereafter referred to as Moroney.

Regarding claim 18:

Le Berre teaches "A scrambled data and/or service distribution system for
at least one master terminal and at least one slave terminal, each equipped with
a security processor, the system comprising: a central subscriber management
module; an entitlement management message generator; a scrambling platform;"
as **[(Le Berre, column 1 line 62 to column 2, line 4) shows a central
management device that generates and encrypts an entitlement
management message]**, but fails to explicitly disclose "means for attributing to
the master terminal a first secret code, and to each slave terminal a second
secret code in a biunique relationship with the first secret code; means for
transferring the first secret code to the slave terminal; and control means for

authorizing reception of the data and/or services by a slave terminal only if the first secret code is previously stored in the slave terminal."

However, Moroney teaches "means for attributing to the master terminal a first secret code, and to each slave terminal a second secret code in a biunique relationship with the first secret code; means for transferring the first secret code to the slave terminal; and control means for authorizing reception of the data and/or services by a slave terminal only if the first secret code is previously stored in the slave terminal" as **[(Moroney [0036]) shows that identical authentication keys must be delivered to both the slave and master boxes in order for them to communicate correctly. (Moroney, [0037]) shows the master encoding and delivering a message with the shared authentication key. The slave will only continue operation if the slave has the same authentication key as the master]**.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have applied the teaching of Le Berre into Moroney as both deal with the common field of multiple set-top box security utilizing both master and slave terminals.

The ordinary skilled person would have been motivated to have applied the teaching of Le Berre into Moroney, since Le Berre conveys a method of using smart cards for additional set-top box security between master and slave terminals (Le Berre column 1, line 58 to column 2, line 12).

Regarding claim 19:

Le Berre teaches "A system according to claim 18, comprising a single master terminal and a single slave terminal" as **[(Le Berre, column 1 lines 62-64) shows a master decoder attached to at least one slave decoder]**.

Regarding claim 20:

"A system according to claim 18, comprising a plurality of master terminals and a plurality of slave terminals."

Since both Moroney and Le Berre disclose a single master and multiple slaves, expanding a single master terminal into multiple master terminals would have been an obvious design choice to one skilled in the art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER B. ARCHER whose telephone number is (571)270-7308. The examiner can normally be reached on M-F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Pham can be reached on (571)272-3689. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHRISTOPHER B ARCHER/
Examiner, Art Unit 4148

/THOMAS K PHAM/
Supervisory Patent Examiner, Art Unit 4148